

AMENDMENTS TO THE CLAIMS

Please amend claim 1 and add new claims 17-33 as follows:

Listing of claims:

1. (Currently amended) A computer-readable medium having computer-executable instructions for performing steps to communicate with a remote terminal for displaying graphic user interface images, comprising:

receiving a drawing request to display a fragment on the remote terminal, the fragment including a plurality of glyphs;

determining whether the fragment has been cached in a fragment cache at the remote terminal; and

when it is determined that the fragment has been cached, sending a fragment index associated with the fragment to the remote terminal, the fragment index identifying an entry in the fragment cache that stores data representing the fragment.

17. (New) A computer-readable medium having stored thereon a data structure, comprising at least a first table having a plurality of cells each containing graphic representation data for a glyph, and a second table having a plurality of entries each containing an array of cell indices corresponding to glyphs in a text fragment, each of the cell indices identifying a cell in said at least a first table, wherein the computer readable medium has computer-executable instructions for performing steps to communicate with a remote terminal for displaying graphic user interface images, comprising:

receiving a fragment index identifying an entry in the second table; and

displaying the fragment associated with the received fragment index.

18. (New) A computer-readable medium as in claim 17, wherein the array of cell indices includes coordinate data representing separations between the glyphs in the fragment.

19. (New) A computer-readable medium as in claim 18, wherein the coordinate data represent a space between two character glyphs.

20. (New) A computer-readable medium as in claim 1, wherein the determining act comprises testing the fragment cache to verify that each glyph in the fragment is stored in the fragment cache.

21. (New) A computer-readable medium as in claim 20, further comprising:
storing a plurality of glyph caches on the remote terminal,
wherein the fragment cache comprises a plurality of entries each having location information identifying storage locations in the glyph caches for the glyphs of the fragment.

22. (New) A computer readable medium as in claim 20, having further computer-executable instructions for performing the steps of identifying a glyph in the fragment that is not currently stored in the cache, sending graphic representation data for said glyph and a cell index to the remote terminal, the cell index identifying a cell in the glyph caches for storing the graphic representation data for said glyph.

23. (New) A computer-readable medium as in claim 1, wherein the fragment cache is implemented using a glyph caching scheme.

24. (New) A computer-readable medium as in claim 1, having further computer-executable instructions for performing the step of maintaining a local fragment cache identification table to identify which fragments are cached on the remote terminal.

25. (New) A computer-readable medium as in claim 24, wherein the local fragment cache identification table stores fragment identification values comprising information identifying one or more fragment storage locations in the fragment cache at the remote terminal.

26. (New) A computer-readable medium as in claim 25, wherein the local fragment cache identification table comprises a lookup table having fragment keys associated with fragment indices identifying corresponding entries in the fragment cache at the remote terminal.

27. (New) A computer-readable medium as in claim 26, wherein the fragment cache is based on a glyph cache system.

28. (New) A computer-readable medium as in claim 27, having further computer-executable instructions for performing the step of maintaining a local glyph cache lookup table for the glyph caches stored at the remote terminal, wherein the glyph cache lookup table comprises glyph keys associated with cache cell indices for identifying corresponding cells in the glyph caches.

29. (New) A computer-readable medium as in claim 1, having further computer-executable instructions for performing the steps of:

when it is determined that the fragment has not been cached:

identifying missing glyphs of the fragment that have not been cached at the remote terminal;

caching the missing glyphs at the remote terminal;

determining a fragment index for the fragment, the fragment index identifying an entry in the fragment table for storing said fragment;

storing the fragment index on a local computer system for maintaining the fragment cache on the remote terminal; and

sending the fragment index to the remote terminal for caching the fragment in an entry of the fragment cache identified by the fragment index.

30. (New) A method of displaying fragments each containing a plurality of glyphs on a remote computer, comprising:

- caching a fragment on the remote computer;
- assigning a fragment identification value to the cached fragment;
- receiving a request to display the fragment on the remote computer;
- determining that the fragment has been cached on the remote computer; and
- sending a request to the remote computer to display the cached fragment, the request including the fragment identification value.

31. (New) A method as in claim 30, wherein the remote computer includes a fragment cache for managing cached fragments, the fragment cache having a plurality of entries each corresponding to a cached fragment and containing information identifying locations of data for glyphs of said corresponding cached fragment.

32. (New) A method as in claim 31, wherein the steps of assigning, receiving, determining and sending are performed by a server computer system.

33. (New) A method as in claim 32, further including the step of maintaining by the server computer system a fragment cache identification table for determining which fragments have been cached on the remote computer.